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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,028	02/17/2004	Paul E. Furner	J-3705	9273
28165	7590	10/18/2005		
S.C. JOHNSON & SON, INC. 1525 HOWE STREET RACINE, WI 53403-2236			EXAMINER COCKS, JOSIAH C	
			ART UNIT	PAPER NUMBER
			3749	

DATE MAILED: 10/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/780,028

Applicant(s)

FURNER, PAUL E.

Examiner

Josiah Cocks

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date various.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings filed 2/17/2004 are accepted by the examiner.

Information Disclosure Statement

2. The information disclosure statements filed 5/14/2004, 4/27/2005, and 9/29/2005 are acknowledged.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 29-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 29 recites the limitation "said capillary lobe" in line 5. There is insufficient antecedent basis for this limitation in the claim. As best can be determined, it appears applicant intended to first introduce a capillary lobe and has been regarded as such for the purpose of an examination on the merits.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 2, 7, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,842,850 to Pappas (“Pappas”) (cited by applicant).

Pappas discloses in Figures 1-14 the invention as described in applicant’s claims 1, 2, 7, and 9. In particular, Pappas shows a candle (10) comprising a meltable solid fuel element (see col. 3, lines 10, 13), a heat conductive/melting plate (44, made of metal, see col. 3, lines 18-29 and col. 4, line 24), and a capillary lobe (at least items 40 and 54, Figs. 5 and 6) which engages the base portion of a wick holder (e.g., 16, 48, 50) with wick (18). The fuel is made of a volatile wax and the wick holder is considered to be configured to cause the candle to burn out if it is not engaged with the capillary lobe.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 8 and 13 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Pappas.

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In regard to claims 8 and 13, Pappas clearly shows that as the wax body of the candle burns the wax does not stay attached to the melting plate (44)(e.g. see Figs. 2-6). Therefore, it is inherent in the structure of this plate that it is has sufficiently treated to be self-cleaning as recited in applicant's claims.

9. Claims 3, 4, 6, 10-13, 20, 21, and 23-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pappas as applied to the claims above in view of U.S. Patent No. 3,910,753 to Lee ("Lee") (cited by applicant).

Pappas teaches all the limitations of claims 3, 4, 6, 10-13, 20, 21, and 23-28 except for a heat conductive fin on the wick holder and the wick is located about .25 inches above the support plate and allows for fuel flow from the support plate by capillary action to said wick. Pappas also possibly does not disclose the teaching that the fuel element is replaceable.

Lee teaches a candle in the same field of endeavor as Pappas. In particular, Lee shows a candle having a support base (11) and a wick holder (H, with body 17). The wick holder supports the wick (W) at least about .25 inches above the base (see Fig. 3) and includes flow channels (20) that allows for wax melted by the holder (body 17, including lower flange 19) to pass through the channels by capillary action to reach the wick (see col. 3, line 56 through col. 4, line 2). The wick holder (17) further includes an upper flange portion (18) that, along with lower flange (19) form heat conductive fins and raised heat conductive portions (see col. 3, lines 44-55).

In regard to the recitation in the claims of a replaceable fuel element, Lee makes clear that it is understood in the art additional wax may be supplied to candle assemblies (i.e. that of

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both Lee and Pappas) in order to replenish consumed wax (see col. 5, lines 1-6). A person of ordinary skill in the would therefore consider the wax added in Pappas to also be capable of being replenished and is therefore properly considered replaceable in order to desirably replenish/replace wax consumed by the flame produced by the wick.

Therefore, in regard to claims 3, 4, 6, 10-13, 20, 21, and 23-28, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the candle of Pappas to incorporate the wick holder structure of Lee to desirably form a wick holder that operates in conjunction with a lower support plate to desirably cause the wick holder to melt the surrounding wax in order to render it fluid so that it may be conducted to the wick to support a flame (see Lee, col. 2, lines 3-16).

10. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pappas and Lee as applied to claim 3 above and further in view of U.S. Patent No. 3,730,674 to Gross ("Gross").

Pappas and Lee teach all the limitations of claim 5 except possibly for starter bump on the top surface.

Gross teaches a candle in the same field of endeavor as Pappas. In Gross, a wick (14) lies within a well (18). Gross also identifies that the surface through which the wick extends may be varied as desired (see col. 3, lines 41-45). The sides of this well function to form raised portions that are considered to constitute the starter bump as claimed. The raised side wells of this well provide for quick pooling of wax around the wick that aids in combustion (see col. 3, lines 24-45).

Therefore, in regard to claim 5, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the candle of Pappas to incorporate the well side wall/bump portions of Gross to desirably promote wax pooling around the wick end during burning of the wick (see Gross, col. 3, lines 24-45).

11. Claims 14-16, 18, 19, 29-32, 34-36, 38, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pappas and Lee as applied to the claims above, and further in view of U.S. Patent No. 2,713,256 to Oesterle et al. ("Oesterle").

Pappas and Lee teach all the limitations of claims 14-16, 18, 19, 29-32, 34-36, 38, and 39 except that the heat conductive surface is shaped to cause pooling of liquid fuel, and specifically in the form of a concave depression.

Oesterle teaches a candle in the same field of endeavor as Pappas. In Oesterle, a wick holder (9) is supported on a support base (7) that includes a top surface that forms a concave depression (12) that functions to promote wax pooling (see col. 2, lines 41-43).

Therefore, in regard to claims 14-16, 18, 19, 29-32, 34-36, 38, and 39, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the candle of Pappas to incorporate a support surface with a concave depression as taught in Oesterle for the desirable purpose of pooling the wax such that burning does not stop until all the wax has been consumed (see Oesterle, col. 2, lines 43-48).

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12. Claims 17, 22, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pappas in view of Lee and Oesterle as applied to claims 14, 21, 34 above, and further in view of U.S. Patent No. 3,730,674 to Gross ("Gross").

Pappas and Lee teach all the limitations of claims 14, 21, 34 except possibly for starter bump on the top surface.

Gross teaches a candle in the same field of endeavor as Pappas. In Gross, a wick (14) lies within a well (18). Gross also identifies that the surface through which the wick extends may be varied as desired (see col. 3, lines 41-45). The sides of this well function to form raised portions that are considered to constitute the starter bump as claimed. The raised side wells of this well provide for quick pooling of wax around the wick that aids in combustion (see col. 3, lines 24-45).

In regard to claims 17 and 37 and the recitation of specific temperatures of the wax pool surrounding the wick, as Oesterle clearly teaches that molten wax is formed is pooled around the wick, to have selected specific temperatures for this molten wax would be simply a matter of optimizing the prior art, obtainable through routine experimentation. See MPEP 2144.05(II)(A). Accordingly, the recitations of these temperatures are not considered to be patentably distinct.

Therefore, in regard to claims 14, 21, 34, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the candle of Pappas to incorporate the well side wall/bump portions of Gross to desirably promote wax pooling around the wick end during burning of the wick (see Gross, col. 3, lines 24-45).

Conclusion

13. This action is made non-final. A THREE (3) MONTH shortened statutory period for reply has been set. Extensions of time may be available under the provisions of 37 CFR

1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent Nos. 1,484,64 (Rhoads), 4,381,914 (Ferguson) and WO 2004/083349 are cited to further show the state of the art considering candle structures.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Josiah Cocks whose telephone number is (571) 272-4874. The examiner can normally be reached on weekdays from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ehud Gartenberg, can be reached at (571) 272-4828. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair>. Any questions on access to the Private


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PAIR system should be directed to the Electronic Business Center (EBC) at (866) 217-9197
(toll-free).

jcc
October 11, 2005


JOSIAH COCKS
PRIMARY EXAMINER
ART UNIT 3749